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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,114	02/05/2002	Dan Kikinis	ISURFTV155	4131
52940 7590 05/18/2007 HOLLAND & KNIGHT LLP 131 S. DEARBORN STREET 30TH FLOOR CHICAGO, IL 60603			EXAMINER VU, NGOC K	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 05/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/072,114	Applicant(s) KIKINIS ET AL.	
	Examiner Ngoc K. Vu	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7-10,12,13,17,21-24,26-29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7-10,12,13,17,21-24,26-29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 2/28/07 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 7-10, 12, 13, and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 31, it appears that the limitations "displaying the reduced video image of real-time programming in each of the individual image areas" in lines 13-14 and 16-17, respectively, referring to displaying the same reduced image in every individual image area. This contradicts to what disclosed in the applicant's specification. That is, a reduced size display or a thumbnail displayed in an individual image area is associated with a channel/program in light of the specification. Accordingly, examiner considers this limitation as *displaying the reduced video image of real-time programming in the one of the individual image areas* in light of the specification for examining purposes only. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1, 17 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (U.S. 6,732,371 B1) in view of Sundqvist et al. (US 6,549,669 B1).

Regarding claim 1, Lee discloses a method for an electronic programming guide (EPG) (see figures 4a-4e) comprising: providing a plurality of individual image areas (PIP areas) in an EPG display (as shown in figures 4a-4e); prompting a viewer to select at least one channel to display in one of the individual image areas (once the channel table is shown on the screen, it prompts a viewer to select at least one channel to be displayed on the PIP areas - see figures 4a-4e); capturing a snapshot from a video stream (via controller 34 - see col. 5, lines 35-39); determining a snapshot is the most presentable snapshot captured from the video stream (extract video information for displaying PIP video - see col. 5, lines 35-39); converting a presentable snapshot into a reduced video image of real-time programming (it is noted that programs of a required channel are sequentially tuned by a tuner and moment videos for each program are stored in a memory. When a channel selected by a user from the program table, a tuner tunes the selected program to display still video of previous or next program in the selected channel at both sides the moving video in PIP types by reading out the memory); and displaying a reduced video image of real-time programming in one of the individual image areas, wherein the reduced video image is associated with the selected channel (displaying the still video of the next program or previous program associated with the selected channel - see figures 4a-4c; col. 6, lines 17-48).

Lee does not explicitly disclose detecting a scene change in a video stream. However Sundqvist discloses analyzing the received video data to determine a scene change, for example, from scene A to scene B to further exchange video data with a memory to provide for smooth switching among multiple scenes in video (see col. 4, lines 30-57 and figure 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

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was made to modify the system of Lee by detecting a scene change in a video stream to exchange video data with a memory as disclosed by Sundqvist in order to provide for smooth switching among multiple scenes in video.

Regarding claim 17, Lee discloses an image-oriented electronic programming guide (EPG) (see figures 2 and 4a-4e) apparatus comprising: a tuner (11) to tune to a selected channel to receive a video stream (see col. 4, lines 59-60); a shutter function (within 33) to capture a snapshot of the video stream (extract video information for displaying PIP video - col. 5, lines 35-39); an image improver (within 34) to select for display the snapshot to be a most presentable snapshot captured from the video stream (extract video information for displaying PIP video - see col. 5, lines 35-39); and an EPG (34), coupled to the tuner, to display the snapshot in an individual image area associated with the selected channel (for example, still videos of the previous and next programs in the selected channel KBS2 are displayed on the upper portion of the program table in PIP areas - see figures 4a-4c; col. 6, lines 11-15 and 19-39; col. 5, lines 12-19).

Lee does not explicitly disclose a scene detector to detect a scene change in the video stream. Lee does not explicitly disclose detecting a scene change in a video stream. However Sundqvist discloses scene change detector 71 analyzes the received video data to determine a scene change, for example, from scene A to scene B to further exchange video data with a memory to provide for smooth switching among multiple scenes in video (see col. 4, lines 30-57 and figure 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Lee by detecting a scene change in a video stream to exchange video data with a memory as disclosed by Sundqvist in order to provide for smooth switching among multiple scenes in video.

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Claim 31 recites similar limitations of claim 1, therefore, it is rejected for the same reasons.

6. Claims 7-10, 12, 13, 21-24, and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (U.S. 6,732,371 B1) in view of Sundqvist et al. (US 6,549,669 B1) and further in view Yeo et al. (U.S. 6,870,573 B2).

Lee does not explicitly teach that the snapshot is determined to be the most presentable snapshot when the snapshot has a best contrast, a median brightness, or a most color saturation, or filtering the snapshot by enhancing a contrast or a color saturation of the snapshot. However, Yeo teaches that a system allows display parameters 355 to be adjusted in order provide the best images as a subset of the captured frames displayed in a program channel guide. That is, Yeo teaches determining which one is the best image from the captured frames to be displayed based on the set parameters. (See col. 9, lines 9, lines 19-21 and figures 6 & 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of Lee and Sundqvist by determining which one is the best image from the captured frames to be displayed based on the set parameters as taught by Yeo in order to provide the high quality of image for better viewing.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



NGOC K. VU
PRIMARY EXAMINER
Art Unit 2623

May 14, 2007